

5634

Form 504  
Rev. Dec. 1933  
DEPARTMENT OF COMMERCE  
U.S. COAST AND GEODETIC SURVEY  
R. S. PATTON, DIRECTOR

## DESCRIPTIVE REPORT

*Topographic* } Sheet No. 29  
*Hydrographic* }

State Georgia

### LOCALITY

Vicinity of Doboy Sound

Connegon River to Darien River

1934

CHIEF OF PARTY

C.A. Esner

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 29 5634

REGISTER NO.

State Georgia  
General locality <sup>Vicinity of</sup> Doboy Sound ~~back Channels~~  
Locality Connegon River to Darien River  
Scale 1/10,000 Date of survey October-November 19 34  
Vessel Party No. 23  
Chief of Party C. A. Egner  
Surveyed by C. A. Burmister  
Protracted by V. F. Simmons, L. B. Ackerman  
Soundings penciled by <sup>J.G.</sup> Simmons, Patterson  
Soundings in ~~fathoms~~ feet  
Plane of reference M. L. W.  
Subdivision of wire dragged areas by  
Inked by James Cornick  
Verified by James Cornick  
Instructions dated December 5, 1933, 19  
Remarks:

DESCRIPTIVE REPORT  
TO ACCOMPANY  
HYDROGRAPHIC SHEET NO. 29

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INSTRUCTIONS:

This sheet was executed under Instructions dated December 5, 1933, covering operations of Field Party No. 23.

PURPOSE:

To provide a more comprehensive survey than has before been available.

LIMITS AND  
JUNCTIONS:

This sheet lies to the west of Doboy Sound and includes the Connegon River, North River and side creeks leading therefrom. Sheet 29 joins sheet 7 (MIKAWA) to the northeast, sheet 6 (MIKAWA) to the east, and sheet 5 (MIKAWA) to the south.

CHARACTER  
OF LOCALITY:

This area covers the relatively unimportant section between Sapelo Sound and Doboy Sound which falls to the westward of the Inside Route. This accounts for its omission from the general area of sheets 6 and 7 (MIKAWA).

The rivers are not long but lead in a crooked course from the main waters of the Sounds to the high ground just north of Darien.

CONTROL:

Control for the hydrography was furnished by a few signals located by plane-table (supplemented by a few located by sextant fix) all based on a few triangulation stations of the 1932 (C.M.D.) breakdown scheme.

Relatively few signals were required, since the area is comparatively open flat marsh, making it possible to take sextant fixes some distance away.

No additional triangulation was done within the confines of this sheet.

Shoreline, for the most part, was provided by the 5-lens 1/21,500 (approx) flights, reduced to the scale of this sheet by direct reduction with the new reduction camera in the Photo-compilation section. The eastern edge of the sheet fell within the single lens flights, from which the shoreline was traced.

CONTROL  
VERTICAL:

Soundings were reduced from tidal data obtained at a recovered MIKAWA staff at the mouth of the Hudson River (Doboy Sound) and at the old Sapelo Lighthouse Doboy Sound. In this latter case, a new staff was established and leveling done to the old bench marks, the plane for which had been previously determined. The MIKAWA staff and plane at this point had been destroyed, and therefore could not be used.

METHODS:

The standard methods with hand lead operating from a small launch were used throughout.

In the side channels only one or two lines were run to indicate the best water. No attempt was made to determine the zero curve in the side channels.

Some very unimportant side creeks were omitted as for instance the one around Pine Island (off of Mayhall Creek) as having no value.

In general the hydrography was completely controlled by sextant fix, supplemented in a few cases by spotting of position from the shoreline.

COMPARISON WITH  
PREVIOUS SURVEYS:

Since no survey had ever been made of these channels or shoreline, no satisfactory basis for comparison exists.

*Note: Practically all of the area covered by this sheet is also covered by H-959 (1868) and H-964 (1868) although only a small portion is shown on the sheet.*

*H.M.M.*

GEOGRAPHIC  
NAMES:

Charted ones have been retained in the absence of any better information.


COAST PILOT  
INFORMATION:

Nothing worthy of inclusion in the Coast Pilot is found on this sheet, as it all falls outside the Inside Route.

TIDAL DATA,  
STATISTICS,  
AND LIST OF SIGNALS:

Are all shown on accompanying tables.

Respectfully,

  
C. A. Eger,  
Hyd. & Geod. Engr.,  
Chief of Party.

# Hydrographic Statistics Sheet No. 29

Date	Day	Vol.	Boat	Miles Snd'gs.	Number Soundings	Number Positions
11/20/34	a	1	OGLETHORPE	39.3	1192	301
21	b	1	"	20.0	633	162
21	b	2	"	11.2	367	96
22	c	2	"	31.4	932	236
23	d	2	"	10.0	350	94
23	d	3	"	2.5	145	37
Totals				114.4	3619	926

List of signals on Hydrographic Sheet No. 29

Triangulation Stations.

Union Island CHIMney

AIKENS

Fox 2, 1932

Atwood 1932

Topographic Signals.

Tel	Rag
-----	-----

Mink	Amy
------	-----

Jenk	Folloy
------	--------

End	Get
-----	-----

Dead	Vex
------	-----

Hydrographic (sextant) locations.

Cat	Fish
-----	------

Creek	Tin
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Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. 5634

The following statistics will be submitted with the  
cartographer's report on the sheet:

Number of positions on sheet	...926
Number of positions checked	....81
Number of positions revised	.....47
Number of soundings recorded	...3619
Number of soundings revised	many erased and replotted
Number of signals erroneously plotted or transferred	.....

Date: Sept. 3, 1935

Verification by J. McConnell

Time: 76 hr.

Review by H. W. Murray

Time: 17 1/2 "



Survey No. H 5634

Date. Feb. 7, 1935

Chart No. 1241

Names underlined in red approved March 24, 1935

Diagram No. 1241 - 2

Examination by W. J. W.

Approved by the Division of Geographic Names, Department of Interior. \*

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

(M-13)

March 21, 1935.

Division of Hydrography and Topography:

✓ Division of Charts: Attention Mr. E. P. Ellis

Tide Reducers are approved in  
3 volumes of sounding records for

HYDROGRAPHIC SHEET 5634

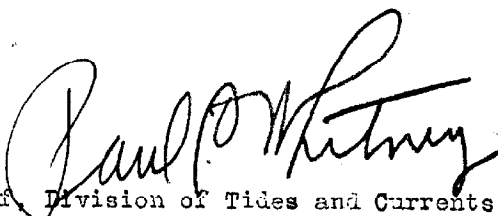
Locality Connegon River to Darien River, Ga.

Chief of Party: C. A. Egner in 1934  
Plane of reference is mean low water, reading  
3.5 ft. on tide staff at Hudson River  
6.9 ft. below B.M.1

Reducers from tides at Sapelo Light House were verified with Fort  
Screven observations, time 20 minutes later, since record for  
Sapelo Light House was not available.

Height of mean high water above plane of reference is 7.2 ft. at  
Hudson River, 6.8 ft. at Sapelo Light House.

Condition of records satisfactory except as noted below:

  
Chief, Division of Tides and Currents.

Verifier's Report on H-5634.

Records:

Records were in fairly good shape.

Drafting:

Plotting was good. Errors made by field platter were due mostly to poor shoreline.

Remarks:

Shoreline was compared with T-5121, T-5122, T-5220 and T-5221 all photographed in Nov. 1933. Nearly half the verifier's time was spent in reversing shoreline which necessitated changing numerous positions.

The control on this sheet is poor. No faith can be placed in any of the topographic or hydrographic signals. The field plotting of positions 52-116a was accepted by the verifier as being as good a guess as any. Fixes for these positions which fall in the lower part of May Hall Creek were based on signals which the field party ~~admits~~ admit to be erroneously located. But there is no information concerning correct locations. The control is also inadequate. One position had a right angle of 14 degrees and a left angle of 9 degrees and these angles taken on poorly located signals.

Verifier has indicated on this sheet by green arrows certain sections which were surveyed by Lieut. Bond on H-5631 earlier in the year 1934. A tracing of Lieut. Bond's work in these areas accompanies this report. In view of the numerous inaccuracies of this sheet (H-5634), it is verifier's opinion that Lieut. Bond's work should be accepted instead of trying to combine the two surveys.

Not in and  
Tel only  
J.A.M.M.

Green arrows  
removed  
See Rev. for  
disposition.  
H.M.M.

An insert has been added to the sheet as shown. This was done in this office. Field party could very easily have laid out the sheet so that the insert would not have been necessary. As it was they made no attempt to plot the positions which fell off the sheet.

Sept. 3, 1935. Submitted,

Jame McCormick.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5634 (1934) - FIELD NO. 29

Connegon River to Darien River, Vicinity of Doboy Sound, Georgia  
Surveyed in 1934

Instructions dated December 5, 1933 (C. A. Egner)

Hand Lead Soundings.

3 Point Fixes on Shore Signals.

Chief of Party - C. A. Egner.  
Surveyed by - C. A. Burnmaster.  
Protracted by - V. F. Simmons and L. B. Ackerman.  
Soundings penciled by - V. F. S. and J. G. Patterson.  
Verified and Inked by - J. A. McCormick.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows;

- a. Names of signals used were not consistently entered at the top of each page of the sounding records.
- b. On the cover label and title page of the sounding records, the position numbers and day letters were in black ink. These were changed to the proper color in the office. (Par. 138).
- c. A number of positions and accompanying soundings plotting outside the limits of the smooth sheet were not shown on an appropriate insert. This was accomplished in the office.
- d. Geographic names were inked on the smooth sheet by the field party instead of being left in pencil as required by Par. 160.

The "Descriptive Report" is clear and satisfactorily covers all matters of importance, except that a statement should have been made regarding the control in May Hall Creek.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project except that the control for the hydrography in May Hall Creek is inadequate. The only fix available for this creek was not only a weak one, but two of the signals involved (Tin and Tel) were not accurately determined. Plotting with the control as given, the lower portion of the creek would be swung from 200 to 500 meters to the westward. The field party realized this difficulty (see Note page 11, Vol. 1) and plotted the positions by shoreline and time. This can only be a rough approximation, since no shoreline was shown on the boat sheet and very few references thereto appear in the sounding records.

May Hall Creek, while narrow, is a deep water creek, connecting North River with Darien River, and warranted a more accurate survey than is given by the present one.

3. Shoreline and Control.

The shoreline shown on this smooth sheet originates with Air Photo Compilation surveys: T-5120 (1933), T-5121 (1933), T-5122 (1933), T-5220 (1933) and T-5221 (1933). The control originates with Graphic Control surveys: T-6195a (1934), T-6195b (1934) and T-6196a (1934) and several sextant located signals.

4. Sounding Line Crossings.

No general system of cross lines was run but those that were, as well as the adjacent lines, show good agreement.

5. Depth Curves.

Within the limits of the survey, the usual depth curves may be satisfactorily drawn including portions of the low water curve.

6. Junctions with Contemporary Surveys.

- a. The junction on the east and northeast with H-5632 (1934) is satisfactory.
- b. The junction on the east and south with H-5631 (1935) was not entirely satisfactory. Numerous inaccurately protracted positions on both H-5631 (1934) and the present survey caused discrepancies of as much as 10 feet in depth. All of these discrepancies were smoothed out in the office.

In May Hall Creek (a connecting stream between Darien and North Rivers), a holiday of about  $\frac{1}{2}$  mile in length exists between the present survey and H-5631 (1934). This gap is covered by H-964 (1868).

7. Comparison with Prior Surveys.

H-959 (1868) and H-964 (1868).

The above surveys which cover the entire area of the present survey are in substantial agreement with the present work with such minor changes as would be expected in view of the time elapsed since the 1868 surveys. Several streams including the holiday discussed in paragraph 6 of this review are not covered by the present survey but are covered by H-964 (1868). In view of the general close agreement between the old and ~~and~~ present survey, soundings of the 1868 survey should be used for charting purposes in such areas.

8. Comparison with Charts No. 574 (Corrected to January 19, 1934), No. 575 (Corrected to December 19, 1934) and 3257 (Corrected to February 7, 1935).

Information shown on the above charts originate with surveys discussed in preceding paragraphs and contains no additional information that needs consideration in this review.

9. Field Plotting.

Field protracting was poor. This was particularly noticeable at the junction with H-5631 (1934) in lat.  $31^{\circ} 23.6'$ , long.  $81^{\circ} 20.5'$  causing a bad disagreement with the latter sheet. This should have been apparent to the field plotter and investigated. Corrected plotting brought the two sheets into good agreement. Field plotting of soundings, however, was accurate and conforms to the requirements of the Hydrographic Manual.

10. Additional Field Work Recommended.

Aside from several streams of minor importance which are not covered by the present survey and are discussed in paragraphs 2 and 6b of this review, the survey is complete and no additional field work is required.

11. Note to Compiler.

Attention is directed to the continued use of prior surveys recommended in paragraph 7 of this review.

12. Superseding Previous Surveys.

Within the area covered, the present survey supersedes the following surveys for charting purposes:

H-959 (1868) in part.

H-964 (1868) in part, except as noted in paragraph 7.

13. Reviewed by - Harold W. Murray, September 20, 1935.

Inspected by - A. L. Shalowitz.

Examined and approved:

C. K. Green, *C. K. Green*  
Chief, Section of Field Records.

*A. S. Borden*  
Chief, Section of Field Work.

*L. C. Colbath*  
Chief, Division of Charts.

*G. H. de*  
Chief, Division of H. & T.

Applied to Chart 840, Dec. 1935 W.A.B.

25 Jan 10, 1936  
E.M.J.

Applied to new compilation drawing of Chart 574 - Nov. 3, 1936 - J.W.  
" " " " Chart 575 June 1937 P.B.C.

Applied to Chart 1242, Mar. 16, 1937 G.H.S.